

PRODUCT AND PROCESS FOR PRODUCING
A MOLDED PRODUCT FROM RECYCLED CARPET WASTE

Abstract of the Disclosure

A molded article such as a floor tile is made from recycled carpet waste which includes a polyvinyl chloride component in the backing material and fiber component having a melting point above the melting point of polyvinyl chloride. A mixture of the recycled carpet material is shredded and additional polyvinyl chloride is fed to an extruder where the polyvinyl chloride is melted without melting the carpet fibers. The resulting mixture is discharged and molded, such as by injection molding, to form a molded product. The molded product includes a continuous matrix of polyvinyl chloride having recycled carpet fibers uniformly dispersed therein. The molded article contains about 45% to about 85% of polyvinyl chloride, about 5% to about 20% of recycled carpet fibers, up to about 5% of a plasticizer and up to about 5% of an ethylene copolymer by weight based on the total weight of the product. The finished product preferably contains about 10% to about 75% by weight of recycled vinyl-backed carpet and about 25% to about 90% by weight of a flexible polyvinyl chloride based on the total weight of the product.